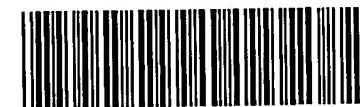


#2



ENTERED OIPE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/086,913

DATE: 03/19/2002  
TIME: 14:49:54

Input Set : A:\#373819 v1 - 33474-PCT-USA-A Sequence Listing.txt  
Output Set: N:\CRF3\03192002\J086913.raw

4 <110> APPLICANT: Higuchi, Maria de Lourdes  
5 Schenkman, Sergio  
7 <120> TITLE OF INVENTION: PREVENTION AND TREATMENT OF  
8 MYCOPLASMA-ASSOCIATED DISEASES  
10 <130> FILE REFERENCE: 33474-PCT-USA-A 068528.0103  
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/086,913  
C--> 13 <141> CURRENT FILING DATE: 2002-03-01  
15 <150> PRIOR APPLICATION NUMBER: PCT/BR01/00083  
16 <151> PRIOR FILING DATE: 2001-03-07  
18 <150> PRIOR APPLICATION NUMBER: Not Yet Assigned  
19 <151> PRIOR FILING DATE: 2001-03-07  
21 <150> PRIOR APPLICATION NUMBER: PI 0002989-0 BR  
22 <151> PRIOR FILING DATE: 2000-03-07  
24 <160> NUMBER OF SEQ ID NOS: 4  
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
28 <210> SEQ ID NO: 1  
29 <211> LENGTH: 2010  
30 <212> TYPE: DNA  
31 <213> ORGANISM: Artificial Sequence  
33 <220> FEATURE:  
34 <223> OTHER INFORMATION: Variant of T. Cruzi trans-sialidase gene  
36 <400> SEQUENCE: 1  
37 atgggcagca gccatcatca tcatcatcac agcagcggcc tgggtgccgcg cggcagccat 60  
38 atggcacccg gatcgagccg agttgagctg tttaagcggc aaagctcgaa ggtgccattt 120  
39 gaaaaggcg gcaaagtcac cgagcgggtt gtccactcgt tccgcctccc cgcccttggt 180  
40 aatgtggacg ggggtgatgt tgccatcgcg gacgctcgct acgaaacatc caatgacaac 240  
41 tccctcattg atacggtggc gaagtacagc gtggacgatg gggagacgtg ggagacccaa 300  
42 attgccatca agaacagtcg tgcctcgtct gtttctcgtg tgggtggatcc cacagtgatt 360  
43 gtgaagggca acaagcttta cgtcctgggt ggaagctaca acagttcgag gagctactgg 420  
44 acgtcgcatg gtgatgagag agactgggat attctgcttg ccgttgggtga ggtcacgaag 480  
45 tccactgcgg gcggcaagat aactgcgagt atcaaattgg ggagccccgt gtcactgaag 540  
46 gaatttttcc cggcggaaat ggaaggaatg cacacaaatc aatttcttgg cgggtgcaggt 600  
47 gttgccattg tggcgtccaa cggaatctt gtgtaccctg tgcaggttac gaacaaaaag 660  
48 aagcaagttt tttccaagat cttctactcg gaagacgagg gcaagacgtg gaagtttggg 720  
49 gagggtagga gtgattttgg ctgctctgaa cctgtggccc ttgagtggga ggggaagctc 780  
50 atcataaaca ctcgagttga ctatcgccgc cgtctggtgt acgagtccag tgacatgggg 840  
51 aattcgtggg tggaggctgt cggcacgctc tcacgtgtgt gggggccctc accaaaatcg 900  
52 aaccagcccg gcagtcagag cagcttcaact gccgtgacca tcgaggggaat gcgtgttatg 960  
53 ctcttcacac acccgctgaa ttttaaggga aggtggctgc gcgaccgact gaacctctgg 1020  
54 ctgacggata accagcgcat ttataacggt gggcaagtat ccattgggtga tgaaaattcc 1080  
55 gcctacagct ccgtcctgta caaggatgat aagctgtact gtttgcatga gatcaacagt 1140  
56 aacgaggtgt acagccttgt ttttgcgcg cgtggttggcg agctacggat cattaatatca 1200  
57 gtgctgcagt cctggaagaa ttgggacagc cacctgtcca gcatttgcac ccctgctgat 1260

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58 ccagccgctt cgtcgtcaga gcgtggttgt ggtcccgtg tcaccacggt tggctcttgtt 1320
59 ggctttttgt cgcacagtgc caccaaaacc gaatgggagg atgctgtaccg ctgctgtcaac 1380
60 gcaagcacgg caaatgcgga gaggggttccg aacggtttga agtttgccggg ggttggcgga 1440
61 ggggcgcttt ggccggtgag ccagcagggg cagaatcaac ggtatcactt tgcaaaccac 1500
62 gcgttcacgc tgggtggcgtc ggtgacgatt cagcaggttc cgagcgtcgc gagtcccttg 1560
63 ctgggtgcga gcctggactc ttctggtggc aaaaaactcc tggggctctc gtacgacgag 1620
64 aagcaccagt ggcagccaat atacggatca acgccggtga cgccgaccgg atcgtgggag 1680
65 atgggtaaga ggtaccagt ggttcttacg atggcgaata aaattggttc ggtgtacatt 1740
66 gatggagaac ctctggaggg ttcagggcag accgttgtgc cagacgggag gacgcctgac 1800
67 atctccact tctacgttgg cgggtatgga aggagtata tgccaacat aagccactg 1860
68 acggtgaata atgttcttct ttacaaccgt cagctgaatg ccgaggagat caggacctg 1920
69 ttcttgagcc aggacctgat tggcacggaa gcacacatgg gcagcagcag cggcagcagt 1980
70 gaaagaagta cgcccgatc cggctgctaa 2010

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72 &lt;210&gt; SEQ ID NO: 2

73 &lt;211&gt; LENGTH: 669

74 &lt;212&gt; TYPE: PRT

75 &lt;213&gt; ORGANISM: Artificial Sequence

77 &lt;220&gt; FEATURE:

78 &lt;223&gt; OTHER INFORMATION: Variant of T. Cruzi trans-sialidase protein

80 &lt;400&gt; SEQUENCE: 2

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81 Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
82 1 5 10 15
83 Arg Gly Ser His Met Ala Pro Gly Ser Ser Arg Val Glu Leu Phe Lys
84 20 25 30
85 Arg Gln Ser Ser Lys Val Pro Phe Glu Lys Gly Gly Lys Val Thr Glu
86 35 40 45
87 Arg Val Val His Ser Phe Arg Leu Pro Ala Leu Val Asn Val Asp Gly
88 50 55 60
89 Val Met Val Ala Ile Ala Asp Ala Arg Tyr Glu Thr Ser Asn Asp Asn
90 65 70 75 80
91 Ser Leu Ile Asp Thr Val Ala Lys Tyr Ser Val Asp Asp Gly Glu Thr
92 85 90 95
93 Trp Glu Thr Gln Ile Ala Ile Lys Asn Ser Arg Ala Ser Ser Val Ser
94 100 105 110
95 Arg Val Val Asp Pro Thr Val Ile Val Lys Gly Asn Lys Leu Tyr Val
96 115 120 125
97 Leu Val Gly Ser Tyr Asn Ser Ser Arg Ser Tyr Trp Thr Ser His Gly
98 130 135 140
99 Asp Ala Arg Asp Trp Asp Ile Leu Leu Ala Val Gly Glu Val Thr Lys
100 145 150 155 160
101 Ser Thr Ala Gly Gly Lys Ile Thr Ala Ser Ile Lys Trp Gly Ser Pro
102 165 170 175
103 Val Ser Leu Lys Glu Phe Phe Pro Ala Glu Met Glu Gly Met His Thr
104 180 185 190
105 Asn Gln Phe Leu Gly Gly Ala Gly Val Ala Ile Val Ala Ser Asn Gly
106 195 200 205
107 Asn Leu Val Tyr Pro Val Gln Val Thr Asn Lys Lys Lys Gln Val Phe
108 210 215 220
109 Ser Lys Ile Phe Tyr Ser Glu Asp Glu Gly Lys Thr Trp Lys Phe Gly

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TIME: 14:49:54

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110	225				230				235				240			
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112					245				250						255	
113	Glu	Gly	Lys	Leu	Ile	Ile	Asn	Thr	Arg	Val	Asp	Tyr	Arg	Arg	Arg	Leu
114				260					265						270	
115	Val	Tyr	Glu	Ser	Ser	Asp	Met	Gly	Asn	Ser	Trp	Val	Glu	Ala	Val	Gly
116			275						280					285		
117	Thr	Leu	Ser	Arg	Val	Trp	Gly	Pro	Ser	Pro	Lys	Ser	Asn	Gln	Pro	Gly
118		290					295					300				
119	Ser	Gln	Ser	Ser	Phe	Thr	Ala	Val	Thr	Ile	Glu	Gly	Met	Arg	Val	Met
120	305					310					315					320
121	Leu	Phe	Thr	His	Pro	Leu	Asn	Phe	Lys	Gly	Arg	Trp	Leu	Arg	Asp	Arg
122					325					330					335	
123	Leu	Asn	Leu	Trp	Leu	Thr	Asp	Asn	Gln	Arg	Ile	Tyr	Asn	Val	Gly	Gln
124				340					345					350		
125	Val	Ser	Ile	Gly	Asp	Glu	Asn	Ser	Ala	Tyr	Ser	Ser	Val	Leu	Tyr	Lys
126			355					360					365			
127	Asp	Asp	Lys	Leu	Tyr	Cys	Leu	His	Glu	Ile	Asn	Ser	Asn	Glu	Val	Tyr
128		370					375					380				
129	Ser	Leu	Val	Phe	Ala	Arg	Leu	Val	Gly	Glu	Leu	Arg	Ile	Ile	Lys	Ser
130	385					390					395				400	
131	Val	Leu	Gln	Ser	Trp	Lys	Asn	Trp	Asp	Ser	His	Leu	Ser	Ser	Ile	Cys
132					405					410					415	
133	Thr	Pro	Ala	Asp	Pro	Ala	Ala	Ser	Ser	Ser	Glu	Arg	Gly	Cys	Gly	Pro
134				420					425					430		
135	Ala	Val	Thr	Thr	Val	Gly	Leu	Val	Gly	Phe	Leu	Ser	His	Ser	Ala	Thr
136			435					440					445			
137	Lys	Thr	Glu	Trp	Glu	Asp	Ala	Tyr	Arg	Cys	Val	Asn	Ala	Ser	Thr	Ala
138		450					455					460				
139	Asn	Ala	Glu	Arg	Val	Pro	Asn	Gly	Leu	Lys	Phe	Ala	Gly	Val	Gly	Gly
140	465					470					475				480	
141	Gly	Ala	Leu	Trp	Pro	Val	Ser	Gln	Gln	Gly	Gln	Asn	Gln	Arg	Tyr	His
142					485					490					495	
143	Phe	Ala	Asn	His	Ala	Phe	Thr	Leu	Val	Ala	Ser	Val	Thr	Ile	His	Glu
144				500					505					510		
145	Val	Pro	Ser	Val	Ala	Ser	Pro	Leu	Leu	Gly	Ala	Ser	Leu	Asp	Ser	Ser
146			515					520					525			
147	Gly	Gly	Lys	Lys	Leu	Leu	Gly	Leu	Ser	Tyr	Asp	Glu	Lys	His	Gln	Trp
148		530					535					540				
149	Gln	Pro	Ile	Tyr	Gly	Ser	Thr	Pro	Val	Thr	Pro	Thr	Gly	Ser	Trp	Glu
150	545					550					555				560	
151	Met	Gly	Lys	Arg	Tyr	His	Val	Val	Leu	Thr	Met	Ala	Asn	Lys	Ile	Gly
152				565						570					575	
153	Ser	Val	Tyr	Ile	Asp	Gly	Glu	Pro	Leu	Glu	Gly	Ser	Gly	Gln	Thr	Val
154				580					585					590		
155	Val	Pro	Asp	Gly	Arg	Thr	Pro	Asp	Ile	Ser	His	Phe	Tyr	Val	Gly	Gly
156			595					600					605			
157	Tyr	Gly	Arg	Ser	Asp	Met	Pro	Thr	Ile	Ser	His	Val	Thr	Val	Asn	Asn
158		610					615					620				

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Output Set: N:\CRF3\03192002\J086913.raw

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159 Val Leu Leu Tyr Asn Arg Gln Leu Asn Ala Glu Glu Ile Arg Thr Leu
160 625                      630                      635                      640
161 Phe Leu Ser Gln Asp Leu Ile Gly Thr Glu Ala His Met Gly Ser Ser
162                      645                      650                      655
163 Ser Gly Ser Ser Glu Arg Ser Thr Pro Gly Ser Gly Cys
164                      660                      665
167 <210> SEQ ID NO: 3
168 <211> LENGTH: 28
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Trans-sialidase gene primer
175 <400> SEQUENCE: 3
176 ggaattccat atggcacccg gatcgagc 28
178 <210> SEQ ID NO: 4
179 <211> LENGTH: 34
180 <212> TYPE: DNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Trans-sialidase gene primer
186 <400> SEQUENCE: 4
187 cggatccggg cgtacttctt tcactggtgc cggt 34
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/086,913

DATE: 03/19/2002

TIME: 14:49:55

Input Set : A:\#373819 v1 - 33474-PCT-USA-A Sequence Listing.txt  
Output Set: N:\CRF3\03192002\J086913.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date